



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/762,753	03/22/2001	Guido Graef	411076.90030	7472

7590 03/24/2005

Quarles & Brady
411 East Wisconsin Avenue
Milwaukee, WI 53202-4497

EXAMINER

LAYE, JADE O

ART UNIT	PAPER NUMBER
----------	--------------

2614

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/762,753

Applicant(s)

GRAEF, GUIDO

Examiner

Jade O. Laye

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to because the system components are not descriptively labeled. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:
- a. Item #'s 11 and 18 are each referred to as "television receiver" on page 2, but applicant refers to them as "television sets" throughout the remainder of the Specification.

Appropriate correction is required.

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

a. The term “operating unit” in Claim 15 is not adequately described within the Specification. It is not clear what applicant regards as his invention.

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. It is suggested applicant include language addressing the integration of UHF/VHF and satellite signals.

Claim Objections

5. Claims 1-4, 6, 9-12, and 14-16 are objected to because of the following informalities:

a. Claims 2, 3, 6, 9, 11, 14, and 15 recite the word “Claim,” which should not be capitalized within the body of the claim.

b. Claim 1 appears to contain a typo. The word “separated” should be “separate.”

c. The phrase “the ac power mains” in Claim 3 lacks antecedent basis in Claim 1.

d. The phrase “the Euro-AV socket” in Claim 4 lacks antecedent basis in Claim 1.

e. The phrase “the Euro-AV socket” in Claim 9 lacks antecedent basis in Claim 8.

f. The phrase “the search stop signal” in Claim 9 lacks antecedent basis in Claim 8.

Furthermore, applicant’s preliminary amendment renders the Claim 9 indefinite and unclear because numerous terms lack antecedent basis.

- g. The phrase "the television receiver housing" in Claim 10 lacks antecedent basis in Claim 1.
- h. The phrase "the microcomputer" in Claim 11 lacks antecedent basis in Claim 10.
- i. The phrases "the television receiver" and "the terrestrial receiving channels" in Claim 12 lack antecedent basis in Claim 1.
- j. The phrase "the corresponding control signal" in Claim 14 lacks antecedent basis in Claim 13.
- k. The phrase "the numerical keyboard" in Claim 16 lacks antecedent basis in Claim 15.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-6, 8-12, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dini et al (EP 0288928) in view of Ma et al. (US Pat. No. 3,737,565).

Claim 1 recites limitations to numerous to list herein. The following rejection will address each element in turn.

As to element “a”, Dini discloses an integrated receiving system capable of receiving both satellite and terrestrial broadcast programming, demodulating the satellite signals to VHF/UHF range, and comprises a house antenna cable capable of receiving UHF/VHF transmissions. (Col. 1, Ln. 1-55 & Fig. 1).

As to elements “b” and “c”, Dini further discloses the use of a television, comprising an output socket, located separate from the satellite receiver. (Fig. 1). (The arrow pointing in the upstream direction indicates the output socket.) It is inherent the system components are connected via a house antenna cable (i.e., coaxial, etc.--because the system as disclosed is not capable of wireless transmission between components) and both the satellite receiver and television set have a house antenna connection. (Fig. 1).

As to element “d”, Dini further teaches the system contains various controllers, which generate control signals for the satellite receiver. (Col. 5, Ln. 39-58 thru Col. 6, Ln. 1-10 & Fig. 1). These controllers can be integrated into the television or located separate from the television. (Col. 6, Ln. 37-39).

But, Dini fails to specifically disclose the limitations recited in elements “e” and “f.” However, within the same field of endeavor, Ma discloses a signal detector/search tuning system in which the system begins searching a frequency range in response to a momentary contact of a “start” switch (i.e., start signal). (Col. 1, Ln. 5-30). This start signal is generated after the system detects engagement of the television. (Col. 2, Ln. 60-67 thru col. 3, Ln. 1-56).

Accordingly, it would have been obvious to one of ordinary skill in this art at the time of applicant's invention to combine the systems of Dini and Ma in order to provide a system capable of search tuning a satellite and terrestrial receiver, thereby providing the user with a system which smoothly integrates both broadcast signals.

Claim 2 recites the satellite television signal receiving stations of claim 1, characterized by the fact that the video signal output socket is a Euro-AV socket. (Note: Euro-AV socket is also referred to in the art as a "SCART" socket). As discussed above, the combined systems of Dini and Ma contain the limitations of claim 1, and Dini further teaches the use of a television comprising a SCART socket. (Col. 2, Ln. 5-15). Accordingly, the combined systems of Dini and Ma contain all limitations of claim 2.

Claim 3 recites the satellite television receiving station of claim 1, characterized by the fact that the control signals generated from the satellite receiver control module for the satellite receiver are transmitted via the house antenna cable, the ac power mains, or a signal connection provided between the television set and satellite receiver to the satellite receiver and that the satellite receiver is prescribed to receive control signals generated by the satellite receiver control module. As discussed above, the combined systems of Dini and Ma contain all limitations of claim 1, and Dini further teaches that controller 13 sends control signals to controller 6 (which forms part of the satellite receiver) via the house antenna cable in order to perform the functions of the system. (Col. 5, Ln. 39-58 thru Col. 6, Ln. 1-10 & Fig. 1). Therefore, the satellite receiver is prescribed to receive control signals from the control module. Accordingly, the combined systems of Dini and Ma contain all limitations of claim 3.

Claim 4 recites the satellite television signal receiving station of claim 1, characterized by the fact that the satellite receiver control module is arranged outside of the television housing and

that image signals are fed to the satellite receiver control module via the Euro-AV socket of the television set, the image signals corresponding to the image signals displayed on the screen of the television set. As discussed above, the combined systems of Dini and Ma contain all limitations of claim 1, and Dini further discloses that controller 13 can be arranged outside of the television and that the television can transmit data upstream. (Fig. 1). It is inherent this upstream data contain image signals which correspond to those on the television because the controller must monitor events such as channel changes in order to notify the system to engage switching. Lastly, as discussed above, Dini teaches the television can contain a SCART socket. (Col. 5, Ln. 5-15). Accordingly, the combined systems of Dini and Ma contain all limitations of claim 4.

Claim 5 recites the satellite television signal receiving station according to claim 1, characterized by the fact that the control signals generated in the satellite receiver control module contain a search stop signal for the satellite receiver. As discussed above, the combined system of Dini and Ma contain all limitations of claim 1, and Ma further teaches the system sends a recognition signal to the frequency scanner signaling the scanner to stop. (Col. 3, Ln. 10-56). Accordingly, the combined system of Dini and Ma contain all limitations of claim 5.

Claim 6 recite the satellite television signal receiving station of claim 5, characterized by the fact that the satellite receiver control module has a detector, which detects the presence of an image signal and generates the search stop signal when the image is detected. As discussed above, the combined systems of Dini and Ma contain all limitations of claim 5, and Ma further teaches the system comprises a signal detector, which detects the presence of an image signal and generates the stop signal (i.e., recognition signal) in response. (Col. 3, Ln. 10-56). Accordingly, the combined system of Dini and Ma contain all limitations of claim 6.

Claim 8 recites the satellite television signal receiving station of claim 1, characterized by the fact that the satellite receiver has the means to introduce a code signal into the television signal. As discussed above, the combined system of Dini and Ma contain all limitations of claim 1, and Dini further teaches controller 6 (i.e., satellite receiver) encodes the signal with various data such as the desired channel number and conversion channel number. (Col. 5, Ln. 39-58 thru Col. 6, Ln. 1-10). Therefore, the combined system of Dini and Ma contain all limitations of claim 8.

Claim 9 recites the satellite television signal receiving station according to claim 8, characterized by the fact that the satellite receiver control module has a detector that detects the presence of the code signal in the television signals present at the Euro-AV socket and generates the search stop signal only when the code signal is present. As discussed above, the combined systems of Dini and Ma contain all limitations of claim 8, and Ma further teaches the system sends a recognition signal to the frequency scanner signaling the scanner to stop. (Col. 3, Ln. 10-56). This teaching, coupled with the teaching of Dini discussed under the rejection of claim 8, will render a system that only generates a stop signal when a recognition signal is detected. Accordingly, the combined systems of Dini and Ma contain all limitations of claim 9.

Claim 10 recites the satellite television signal receiving station according to claim 1, characterized by the fact that the satellite receiver control module is arranged within the television receiver housing. As discussed above, the combined systems of Dini and Ma contain all limitations of claim 1, and Dini further teaches the controller can be located within the television. (Col. 6, Ln. 49-53). Therefore, the combined systems of Dini and Ma contain the limitations of claim 10.

Claim 11 recites the satellite television signal receiving station of claim 10, characterized by the fact that the satellite receiver control module is the microcomputer of the television receiver. As discussed above, the combined systems of Dini and Ma contain all limitations of claim 10, and Dini further teaches the controller located within the television can be a microprocessor. (Col. 6, Ln. 34-48). Therefore, the combined systems of Dini and Ma contain the limitations of claim 11.

Claim 12 recites the satellite television signal receiving system of claim 1, and further limitations too numerous to recite herein. As discussed above, the combined systems of Dini and Ma contain all limitations of claim 1, and Dini further teaches the system controller can be programmed to store all free VHF/UHF channels in a user location and can detail what UHF/VHF channels correspond to what satellite channels. (Col. 5, Ln. 39-58 thru Col. 6, Ln. 1-16). Accordingly, the combined system of Dini and Ma contain all limitations of claim 12.

Claim 15 recites the satellite television signal receiving system of claim 1, characterized by the fact that the television set and the satellite receiver have a common operating unit. Applicant's specification is unclear as to what is the scope of "operating unit." However, the examiner interprets the term to mean any system component capable of performing some operation. As discussed above, the combined systems of Dini and Ma contain all limitations of claim 1, and Dini further discloses the television set and satellite receiver have a common operating unit in controller 13. (Fig. 1). Accordingly, the combined system of Dini and Ma contain all limitations of claim 15.

Claim 16 recites the satellite television signal receiving system of claim 15, characterized by the fact that channel selection for terrestrial television signal reception and satellite television signal reception occurs through the numerical keyboard of the common operating unit without

requiring a switching process between terrestrial reception and satellite reception. As discussed above, the combined systems of Dini and Ma contain all limitations of claim 15, and Dini further teaches the use of a command unit with numbered keys (i.e., numerical keyboard) which is used to perform the system operations, thereby allowing the user to channel surf cable and terrestrial broadcast without having to physically switch the cables, sources, etc. Accordingly, the combined system of Dini and Ma contain all limitations of claim 16.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dini in view of Ma as applied to claim 3 above, and further in view of Chanteau. (US Pat. No. 5,905,941).

Claim 7 recites the satellite television signal receiving station according to claim 3, characterized by the fact that the control signals are transmitted in the form of a 22 KHz switching signal. As discussed above, the combined systems of Dini and Ma contain all limitations of claim 3, but fail to specifically recite the limitation of claim 7. However, within the same field of endeavor Chanteau discloses a similar system in which control receivers transmit 22 KHz switching signals upstream. (Col. 5, Ln. 16-27). Therefore, it would have been obvious to one of ordinary skill in this art at the time of applicant's invention to combine the systems of Dini, Ma, and Chanteau in order to provide a system capable of effective switching.

8. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dini in view of Ma as applied to claim 1 above, and further in view of Chanteau. (US Pat. No. 5,905,941).

Claim 13 recites the satellite television signal receiving station of claim 1, characterized by the fact that it has several satellite receivers, several television sets, and several satellite

receiver control modules. As discussed above, the combined systems of Dini and Ma contain all limitations of claim 1, but fail to specifically disclose whether the combined system can be used in a larger system. (But, an obvious rejection could possibly be made). However, within the same field of endeavor, Chanteau discloses a system comprising multiple satellite receivers, television sets, and control modules. In light of this disclosure, using the combined system of Dini and Ma would have been an obvious modification. Accordingly, the combined systems of Dini, Ma, and Chanteau contain all limitations of claim 13.

Claim 14 recites the satellite television signal receiving station of claim 13, characterized by the fact that the control signals generated by the satellite receiver control modules are provided with a code signal for the satellite receiver control modules generating the corresponding control signal. As discussed above, the combined systems of Dini, Ma, and Chanteau contain all limitations of claim 14, and Chanteau further teaches that the control modules generate digital codes representing messages to be transmitted throughout the system. (Col. 3, Ln. 54-64). Accordingly, the combined systems of Dini, Ma, and Chanteau contain all limitations of claim 14.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Macdonald et al (US Pat. No. 5,835,128) disclose a satellite distribution system of a multiple dwelling unit.
- b. Schaffner et al (US Pat. No. 6,104,908) disclose a system for combining satellite and terrestrial broadcasts.

- c. Baek (US Pat. No. 5,420,642) discloses an apparatus for searching an input picture.
- d. Maruoka (US Pat. No. 5,257,106) discloses a receiving system for terrestrial and satellite signals.
- e. Green et al (US Pat. No. 5,073,930) disclose a system comprising multiple satellite receivers.
- f. Herman et al (US Pat. No. 4,885,803) disclose a system which integrates satellite and terrestrial signals.
- g. Williams (US Pat. No. 6,134,419) discloses a transmodulation system which integrates satellite and terrestrial signals.
- h. Hayashi et al (US Pat. No. 5,436,675) disclose a system which integrates satellite and terrestrial broadcasts.
- i. Novak (US Pat. No. 5,787,335) discloses a system which integrates satellite and terrestrial broadcasts.
- j. Mayle (US Pat. No. 3,825,838) discloses a search tune detector.
- k. Parmet et al (US Pat. No. 2,898,400) disclose a tuning system which automatically stops once a valid channel is detected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jade O. Laye whose telephone number is (571) 272-7303. The examiner can normally be reached on Mon. 7:30am-4, Tues. 7:30-2, W-Fri. 7:30-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 09/765²,753
Art Unit: 2612

Page 13

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner's Initials _____
March 17, 2005.


NGOC-YEN VU
PRIMARY EXAMINER